

ALTERNATING PHASE SHIFT MASK DESIGN FOR HIGH PERFORMANCE CIRCUITRY

Abstract

A method of designing an alternating phase shifting mask for projecting an image of an integrated circuit design having a plurality of essentially parallel segments of critical width comprises creating essentially parallel alternating phase shifting regions aligned with the critical width segments and extending beyond ends of at least some of the critical width segments, enclosing the integrated circuit layout and the alternating phase shifting regions within a boundary, extending the alternating phase shifting regions to an edge of the boundary, and thereafter creating an alternating phase shifting mask based on the alternating phase shifting regions.